

REMARKS

Initially, Applicant would like to express his appreciation to the Examiner for the detailed Official Action provided, and for the acknowledgment of Applicant's Claim for Priority and receipt of the certified copy of the priority document in the Official Action.

Claims 1-6, 9-13 and 23-29 are currently pending. Applicant respectfully requests reconsideration of the outstanding rejections, and allowance of all the claims pending in the present application.

On pages 2 and 3 of the Official Action, claims 1, 6, 9, 23, 28 and 29 were rejected under 35 U.S.C. §102(e) as being unpatentable over SHIMOZONO.

Applicant respectfully traverses this rejection under 35 U.S.C. §102(e).

Claims 1 and 23 recite, inter alia, "wherein change in spherical aberration of said first light beam caused by wavelength deviation from a design wavelength due to individual specificity of said light source is corrected by adjusting the diverging/converging angle of said first light beam emerging from said collimator lens".

Applicant submits that SHIMOZONO lacks any disclosure of a *spherical aberration change which is caused by wavelength deviation from a design wavelength due to individual specificity of a light source* being corrected by *adjusting the diverging/converging angle of a light beam emerging from a collimator lens*.

Applicant notes that in the previous Official Actions the Examiner has acknowledged that SHIMOZONO lacks any disclosure of this feature. Further, it is not clear to Applicant why the Examiner has apparently reversed his position regarding the lack of such feature in SHIMOZONO.

Applicant further submits that column 7, lines 16-34 of SHIMOZONO (as designated by the Examiner) clearly does not disclose a *spherical aberration change which is caused by wavelength deviation from a design wavelength due to individual specificity of a light source* being corrected by *adjusting the diverging/converging angle of a light beam emerging from a collimator lens*. In this regard, Applicant notes that column 7, lines 16-34 of SHIMOZONO generally discusses that the combination of the auxiliary lens 5 and the objective lens 3 correct aberration adequately in the case that a first wavelength of light is used with a first disk having a first thickness substrate, and also in the case that a second wavelength of light is used with a second disk having a second thickness substrate. Applicant submits that SHIMOZONO lacks any disclosure of correcting a *spherical aberration change which is caused by wavelength deviation from a design wavelength due to individual specificity of a light source*, much less correcting such spherical aberration by *adjusting the diverging/converging angle of a light beam emerging from a collimator lens*.

Accordingly, if the Examiner intends to maintain his position, Applicant respectfully requests that the Examiner point out any portion of SHIMOZONO which discusses or discloses correction of a *spherical aberration change which is caused by wavelength deviation from a design wavelength due to individual specificity of a light source*. Applicant further requests that the Examiner point out any portion of SHIMOZONO which discusses or discloses correction of such spherical aberration by *adjusting the diverging/converging angle of a light beam emerging from a collimator lens*.

Claim 1 further recites, inter alia, “wherein said collimator lens is located between

first and second optimum positions, the spherical aberration of said first light beam converged onto the recording layer of the first optical disc being minimized when said collimator lens is located at said first optimum position, the spherical aberration of said second light beam converged onto the recording layer of the second optical disc being minimized when said collimator lens is located at said second optimum position”.

Applicant submits that SHIMOZONO lacks any disclosure of *locating a collimator lens between a first position in which the spherical aberration of a first light beam converged onto a first optical disc is minimized, and a second position in which the spherical aberration of a second light beam converged onto a second optical disc is minimized.*

Applicant notes that in the previous Official Actions the Examiner has acknowledged that SHIMOZONO lacks any disclosure of this feature. Further, it is not clear to Applicant why the Examiner has apparently reversed his position regarding the lack of such feature in SHIMOZONO.

Applicant further submits that column 7, lines 16-34 and column 9, lines 56-62 of SHIMOZONO (as designated by the Examiner) clearly does not disclose *locating a collimator lens between a first position in which the spherical aberration of a first light beam converged onto a first optical disc is minimized, and a second position in which the spherical aberration of a second light beam converged onto a second optical disc is minimized.* In this regard, Applicant notes that column 9, lines 56-62 of SHIMOZONO discusses locating the auxiliary lens 5 within a range of distances from a light source. SHIMOZONO describes the end points of this range as being one where aberration correction becomes difficult and one where miniaturization becomes difficult.

Accordingly, if the Examiner intends to maintain his position, Applicant respectfully requests that the Examiner point out any portion of SHIMOZONO which discusses or discloses *locating a collimator lens between a first position in which the spherical aberration of a first light beam converged onto a first optical disc is minimized, and a second position in which the spherical aberration of a second light beam converged onto a second optical disc is minimized.*

Claim 23 further recites, inter alia, “wherein the diverging/converging angle of said first light beam is adjusted so as to minimize spherical aberration of said first light converged onto the recording layer of the first optical disc”.

Applicant notes that in the previous Official Actions the Examiner has acknowledged that SHIMOZONO lacks any disclosure of this feature. Further, it is not clear to Applicant why the Examiner has apparently reversed his position regarding the lack of such feature in SHIMOZONO.

Applicant further submits that column 7, lines 16-34 and column 9, lines 56-62 of SHIMOZONO (as designated by the Examiner) clearly does not disclose *the diverging/converging angle of a first light beam being adjusted so as to minimize spherical aberration of a first light converged onto the recording layer of a first optical disc.* In this regard, Applicant notes these portions of SHIMOZONO (which are discussed above) do not include any discussion of such feature.

Accordingly, if the Examiner intends to maintain his position, Applicant respectfully requests that the Examiner point out any portion of SHIMOZONO which discusses or discloses *the diverging/converging angle of a first light beam being adjusted so as to minimize spherical aberration of a first light converged onto the recording layer*

of a first optical disc.

Applicant further submits that the dependent claims 6, 9, 28 and 29, which are at least patentable due to their respective dependencies from claims 1 and 23, for the above-noted reasons, recite additional features of the invention and are also separately patentable over the prior art of record.

Accordingly, Applicant submits that the rejection of claims 1, 6, 9, 23, 28 and 29 under 35 U.S.C. §102(e) is improper at least for each, and certainly for all, of the above-noted reasons. Applicant respectfully requests withdrawal of this rejection under 35 U.S.C. §102(e), and an early indication of the allowance of all of the pending claims.

On page 4 of the Official Action, claims 2 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over SHIMOZONO in view of IKENAKA et al.

Applicant respectfully traverses this rejection under 35 U.S.C. §103(a).

As an initial matter, Applicant submits that the teachings of IKENAKA et al. do not cure the deficiencies in the disclosure of SHIMOZONO, as noted above with regard to claims 1 and 23.

Applicant further submits that the dependent claims 2 and 24, which are at least patentable due to their respective dependencies from claims 1 and 23, for the above-noted reasons, recite additional features of the invention and are also separately patentable over the prior art of record. In this regard, Applicant submits that the modifications suggested by the Examiner would not have been obvious to one having ordinary skill in the art, and that such modifications are clearly the result of impermissible hindsight reasoning, based upon the disclosure of the present application, rather than being based upon the teachings of the references themselves.

Accordingly, Applicant submits that the rejection of claims 2 and 24 under 35 U.S.C. §103(a) is improper at least for each, and certainly for all, of the above-noted reasons. Applicant respectfully requests withdrawal of this rejection under 35 U.S.C. §103(a), and an early indication of the allowance of all of the pending claims.

On pages 5 and 6 of the Official Action, claims 3, 4, 25 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over SHIMOZONO in view of NISHIWAKI et al.

Applicant respectfully traverses this rejection under 35 U.S.C. §103(a).

As an initial matter, Applicant submits that the teachings of NISHIWAKI et al. do not cure the deficiencies in the disclosure of SHIMOZONO, as noted above with regard to claims 1 and 23.

Applicant further submits that the dependent claims 3, 4, 25 and 26, which are at least patentable due to their respective dependencies from claims 1 and 23, for the above-noted reasons, recite additional features of the invention and are also separately patentable over the prior art of record. In this regard, Applicant submits that the modifications suggested by the Examiner would not have been obvious to one having ordinary skill in the art, and that such modifications are clearly the result of impermissible hindsight reasoning, based upon the disclosure of the present application, rather than being based upon the teachings of the references themselves.

Accordingly, Applicant submits that the rejection of claims 3, 4, 25 and 26 under 35 U.S.C. §103(a) is improper at least for each, and certainly for all, of the above-noted reasons. Applicant respectfully requests withdrawal of this rejection under 35 U.S.C. §103(a), and an early indication of the allowance of all of the pending claims.

On pages 6 and 7 of the Official Action, claims 10, 11 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over ARAI et al. in view of SHIMOZONO.

Applicant respectfully traverses this rejection under 35 U.S.C. §103(a).

Claim 10 recites, inter alia, “wherein said first and second collimator lenses are located so as to respectively correct change in spherical aberration of said first and second light beams caused by wavelength deviations from design wavelengths of said first and second light beams due to individual specificity of said first and second light sources, wherein the first collimator lens is located at a first optimum position so that the spherical aberration of said first light beam converged onto the recording layer of the first optical disc is minimized, wherein the second collimator lens is located at a second optimum position so that the spherical aberration of said second light beam converged onto the recording layer of the second optical disc is minimized”.

In the Official Action, the Examiner acknowledges that ARAI et al. lacks any disclosure of such positioning of the collimator lenses, but contends that providing such positioning of collimator lenses would have been obvious in view of the teachings of SHIMOZONO.

Applicant submits that the modification suggested by the Examiner based upon the teachings of SHIMOZONO would not have been obvious to one having ordinary skill in the art, and that such modification is clearly the result of impermissible hindsight reasoning, based upon the disclosure of the present application, rather than being based upon the teachings of the references themselves.

In this regard, Applicant submits that SHIMOZONO lacks any disclosure or teaching of *first and second collimator lenses being located so as to respectively correct*

change in spherical aberration of first and second light beams caused by wavelength deviations from design wavelengths of first and second light beams due to individual specificity of first and second light sources, much less the first collimator lens being located at a first optimum position so that the spherical aberration of a first light beam converged onto the recording layer of a first optical disc is minimized, and the second collimator lens being located at a second optimum position so that the spherical aberration of a second light beam converged onto the recording layer of a second optical disc is minimized.

In this regard, Applicant notes that column 7, lines 16-34 of SHIMOZONO (as designated by the Examiner) generally discusses that the combination of the auxiliary lens 5 and the objective lens 3 correct aberration adequately in the case that a first wavelength of light is used with a first disk having a first thickness substrate, and also in the case that a second wavelength of light is used with a second disk having a second thickness substrate. Applicant further notes that column 9, lines 56-62 of SHIMOZONO (as designated by the Examiner) discusses locating the auxiliary lens 5 within a range of distances from a light source. SHIMOZONO describes the end points of this range as being one where aberration correction becomes difficult and one where miniaturization becomes difficult.

Accordingly, Applicant submits that these portions of SHIMOZONO do not provide any teaching of *collimator lenses being located so as to correct change in spherical aberration of light beams caused by wavelength deviations from design wavelengths of light beams due to individual specificity of light sources*. Applicant further submits that these portions of SHIMOZONO do not provide any teaching of a

first collimator lens being located at a first optimum position so as to minimize spherical aberration of a first light beam converged onto a first optical disc, and/or a second collimator lens being located at a second optimum position so as to minimize spherical aberration of a second light beam converged onto a second optical disc.

Accordingly, Applicant submits that the teachings of SHIMOZONO cannot reasonably be characterized as curing the deficiencies in the disclosure of ARAI et al. Thus, even assuming, arguendo, that the teachings of the references discussed by the Examiner were to be combined, Applicant submits that such a modified system would not result in the invention defined in the claims.

Applicant submits that the various modifications suggested by the Examiner (as discussed above) would not have been obvious to one having ordinary skill in the art, and that such modifications are clearly the result of impermissible hindsight reasoning, based upon the disclosure of the present application, rather than being based upon the teachings of the references themselves.

Applicant further submits that the dependent claims 11 and 13, which are at least patentable due to their dependency from claim 10, for the above-noted reasons, recite additional features of the invention and are also separately patentable over the prior art of record. In this regard, Applicant submits that the modifications suggested by the Examiner would not have been obvious to one having ordinary skill in the art, and that such modifications are clearly the result of impermissible hindsight reasoning, based upon the disclosure of the present application, rather than being based upon the teachings of the references themselves.

Accordingly, Applicant submits that the rejection of claims 10, 11 and 13 under 35 U.S.C. §103(a) is improper at least for each, and certainly for all, of the above-noted reasons. Applicant respectfully requests withdrawal of this rejection under 35 U.S.C. §103(a), and an early indication of the allowance of all of the pending claims.

On pages 7 and 8 of the Official Action, claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over ARAI et al. in view of SHIMOZONO, and further in view of IKENAKA et al.

Applicant respectfully traverses this rejections under 35 U.S.C. §103(a).

As an initial matter, Applicant submits that the teachings of IKENAKA et al. do not cure the deficiencies in the disclosures of ARAI et al. and SHIMOZONO as noted above with regard to claim 10.

Applicant further submits that the dependent claim 12, which is at least patentable due to its dependency from claim 10, for the above-noted reasons, recites additional features of the invention and is also separately patentable over the prior art of record. In this regard, Applicant submits that the modifications suggested by the Examiner would not have been obvious to one having ordinary skill in the art, and that such modifications are clearly the result of impermissible hindsight reasoning, based upon the disclosure of the present application, rather than being based upon the teachings of the references themselves.

Accordingly, Applicant submits that the rejection of claim 12 under 35 U.S.C. §103(a) is improper at least for each, and certainly for all, of the above-noted reasons. Applicant respectfully requests withdrawal of this rejection under 35 U.S.C. §103(a), and an early indication of the allowance of all of the pending claims.

COMMENTS ON REASONS FOR ALLOWANCE

In regard to the Examiner's indication of allowable subject matter in claims 5 and 27 on page 9 of the Official Action, Applicant does not disagree with the Examiner's indication that the prior art fails to teach or fairly suggest various features of these claims. However, Applicant wishes to make clear that the claims in the present application recite a combination of features, and that the patentability of these claims is also based on the totality of the features recited therein, which define over the prior art. Thus the reasons for allowance should not be limited to those mentioned by the Examiner.

SUMMARY AND CONCLUSION

Reconsideration of the outstanding Official Action, and allowance of the present application and all of the claims therein are respectfully requested and now believed to be appropriate.

Applicant has made a sincere effort to place the present application in condition for allowance and believes that he has now done so.

Should there be any questions or comments, the Examiner is invited to contact the undersigned at the below-listed telephone number. .

Respectfully Submitted,
Shuichi TAKEUCHI



Bruce H. Bernstein
Reg. No. 29,027

Daniel B. Moon
Reg. No. 48,214

October 2, 2007
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191